

### REMARKS

In the Office Action dated October 9, 2003, the Examiner objects to the Second Substitute Specification and objects to the drawing figures. Although not mentioned in the summary, it appears as though the Examiner objects to claim 10. The Examiner rejects claims 2 and 5-7 under 35 U.S.C. § 112, second paragraph, and rejects claims 1-11 under 35 U.S.C. § 112, first paragraph. The Examiner rejects claims 1, 2, 5-11 under 35 U.S.C. § 103(a). With this Amendment, claims 1-10 have been amended. Claims 12-18 have been added, and claim 4 has been canceled without prejudice. After entry of this Amendment, claims 1-3 and 5-18 are pending in the Application. Reconsideration of the Application as amended is respectfully requested.

The Examiner previously requested a copy of the French patent referred to in the specification, number 98 03128. In the Remarks provided in response to the last Office Action, the Applicant stated that a copy of the French patent was included. It is respectfully submitted that this was incorrect. It is respectfully submitted that, as explained in the Information Disclosure Statement (IDS) filed concurrently with the last Office Action, U.S. Patent No. 6,459,181 corresponds to the referenced French patent application. It is respectfully submitted that the information that the Examiner requested with respect to the French patent application is included in the corresponding U.S. patent. For ease of reference, the Applicant has enclosed a duplicate of this reference with the IDS previously filed since the Office Action does not indicate that the Examiner received and considered the IDS.

The Examiner objects to the Second Substitute Specification on several bases. With respect to page 4, line 14 (paragraph [0028]), the word "means" has been removed, and the text has been revised to clarify that the over-molding provides a gap for the passage of the wires. The parenthetical "(section 17)" has been removed as suggested by the Examiner. On page 3, line 12 (paragraph [0020]), the phrase "on the right" has been changed to "adjacent" to more accurately describe the position of the card with respect to the radiator. On page 3, lines 26 and 27 (paragraph [0024]), the recesses have been clarified by labeling a couple with the numeral 18 of Fig. 2. It is respectfully submitted that the Examiner's objection to page 4, lines 2-4 (paragraph [0025]) is not understood. Figure 1 as previously submitted and as amended clearly show that the brass insert 6 extends from one side of the circuit card through a hole in the circuit

card to the other side of the circuit card. Soldering is the way these would be held together, as known by those of skill in the art. Although not shown in the illustrated embodiment, the brass insert 6 could be directly attached to a power component 8 in a similar manner. To address the Examiner's concern, however, the Applicant has drawn a piece of solder at the connection of the brass insert 6 to the circuit card CI in Fig. 1 to provide an example. A reference numeral for this solder 19 has been added to the text of paragraph [0025]. In addition, it is respectfully submitted that the text provides that one connecting step between the printed circuit card C I and the brass insert 6 is removed by directly soldering them together. It is clear that the Applicant is referring to the prior art, where the circuit board would be coupled to an intermediate connector, which was in turn connected to the prior art brass insert. Since this intermediate connector is not used in the instant invention, it cannot be shown in the drawing figures. To clarify this text, however, the Applicant has specifically added language indicating that one connecting step in the prior art has been removed. On page 4, lines 14-21 (paragraph [0028]), the Examiner states that the text refers to features with no relationships to actual details that produce the recited functions. Again, the Examiner's objection is not understood. However, the Applicant, in addition to the change to paragraph [0028] described above, the text has been clarified to state that the over-molding allows the implantation of a connecting module designed to power the insert and the electronic controls and allows the connection towards the exterior by a connector 20 having a complimentary form. The connector 20 has been labeled in Fig. 2.

In addition to the foregoing, changes to the text has been made to correct certain errors due to translation. Also, various changes throughout have been made to conform the specification to the drawing figures, including the drawing changes below. It is respectfully submitted that the changes to the specification made herein address the Examiner's concerns and add no new matter to the application as filed. The Applicant has, in addition to changes to certain of the claims described in more detail below, changed each of claims 1-10 (except claim 4, which has been canceled without prejudice), to put the claims more in conformance with U.S. patent practice and to clarify the claims. It is respectfully submitted that these changes are fully supported by the specification and the drawing figures and add no new matter to the application as filed.

The Examiner objects to the drawing figures under 37 C.F.R. 1.83(a), stating that the drawing figures fail to show all the features of the claims. With respect to claim 1, the feature that the over-molding surrounds the radiator has been amended to clarify that an outer peripheral edge of the over-molding extends perpendicularly from a surface of the over-molding to surround at least a portion of the radiator. This feature is clearly shown in Fig. 1. Claim 4 has canceled without prejudice, rendering the Examiner's objection on this basis moot. In claim 5, the word "directly" has been removed from the claim as it is unneeded. It is respectfully submitted that the brass insert 6 soldered is shown in Fig. 1. Claim 9 has been amended to clarify to state that the over-molding includes a passage. It is respectfully submitted that the passage is shown at arrow 17 in Fig. 2. With respect to the Examiner's comment on page 3, lines 5-7, it is respectfully submitted that the wires referred to in claim 9 are not required to be shown as they are not a feature of the invention as claimed. The feature, which is illustrated, is a passage for wires designed to power the brass insert. In addition, it is respectfully submitted that Fig. 1 shows the brass insert 6 extending through the partition 10 to the circuit board C I.

The Examiner further objects to the drawings as improper because Fig. 1 is unclear and does not show details of the invention as shown in Fig. 2. The schematic diagram of Fig. 1 has been replaced with a new Fig. 1 to more clearly show a partial cross-sectional view of Fig. 2. The new Fig. 1 is similar to that suggested by the Examiner, which more clearly show the radiator 7 and certain portions of the over-molding, but the brass insert 6 and over-molding 9 have been re-drawn to more clearly show these features. In addition a component 11 and soldering 19 have been labeled as discussed previously. It is respectfully submitted that the inclusion of new Fig. 1 addresses the Examiner's concerns. The specification has also been changed to clarify that Fig. 3 is a partial, simplified perspective schematic view showing the mounting of a plate to a housing of a motor unit as discussed with respect to Figures 1 and 2. It is respectfully submitted that this explains the difference between Fig. 2 and Fig. 3. It is respectfully submitted that all of the Examiner's concerns with the drawing figures have been addressed.

The Examiner, on page 2, appears to object to claim 10, stating that line 3 is unclear. Claim 10 has been amended. It is respectfully submitted that the language the Examiner may have found confusing is no longer in the claim.

The Examiner rejects claims 2, 5, 6 and 7 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that the Applicant regards as the invention. With respect to claim 2, "receive an" has been changed to "receive the" to correct antecedent basis. With respect to claim 5, the "power components" has been removed as it is not needed to distinguish the claim. This renders the Examiner's rejection moot. In claim 6, "the components of the plate" has been removed and antecedent basis has been provided for components of the electronic card. In claim 7, the housing has been provided with antecedent basis. It is respectfully submitted that these changes address the Examiner's concerns with the claims, and that each claim is clear and definite and meets the requirements of 35 U.S.C. § 112, second paragraph.

The Examiner rejects claims 1-11 under 35 U.S.C. § 112, first paragraph, as containing subject matter not described in the specification in such a way as to enable one skilled to the art to make and/or use the invention. The Examiner further states the claims are non-enabled for the reasons noted with respect to the figures. It is respectfully submitted that the changes to the figures and the specification noted above address the Examiner's concerns with respect to the drawing figures. The Examiner further states that how the over-molding surrounds the radiator is unclear in claim 1. It is respectfully submitted that the claim 1 now more clearly states that an outer peripheral edge of the over-molding extends perpendicularly from a surface of the over-molding to surround at least a portion of the radiator. This is clearly shown in Fig. 1 and is described in the specification in several locations, including paragraph [0021]. With respect to the Examiner's position that it is unclear exactly what structural details are involved in claims 4, 5 and 9, it is respectfully submitted that the cancellation of claim 4 and the revisions to claims 5 and 9 render these rejections moot.

The Examiner rejects claims 1, 5, 7, 8 and 11 under 35 U.S.C. § 103(a) as being unpatentable over Strobl in view of Siebold et al., Sano et al., Blumenberg and Archer et al. It is respectfully submitted that Strobl does not teach or suggest the features of claim 1 and its dependent claims. The Applicant acknowledges that Strobl teaches a brush holder 14, which is shaped and formed for receiving and holding discrete electrical components, the circuit board, mounting plates and power terminals. (Strobl, col. 1, ll. 64-68). However, it is respectfully

submitted that this is not comparable to the over-molding described in the claimed invention. An over-molding is a part that is molded over one or more additional parts. Claim 1 now explicitly states that over-molding 9 is molded to the brass insert. As described in the specification at paragraph [0010], this makes up for play between the parts, resulting in very high mounting tolerances between the radiator and the brass insert as described in paragraph [0007]. Strobl fails to teach or suggest such a feature. In addition, it is respectfully submitted that Strobl teaches the use of a switch 30 to protect the motor from overheating. (Strobl, col. 3, ll. 28-32). Regardless of Sano et al.'s teaching of a base plate 11 and Archer et al.'s teaching of means for dissipating heat 260, the only motivation to include a heat sink in Strobl is impermissible hindsight. In addition, the combination of all of these references still fails to teach or suggest the feature missing from Strobl when applied alone, an over-molding as described. Since none of Siebold et al., Sano et al., Blumenberg or Archer et al. teach or suggest this feature, any combination of these references with Strobl fails to teach or suggest this feature. For the foregoing reasons, claim 1 and its dependent claims 2, 3 and 5-11 are allowable over the prior art of record.

In addition, it is respectfully submitted that the brush leaf mounting plates 19 are not a brass insert as described by the Applicant. Instead, the brushleaves 16 carry a respective brush 17. Even if the plates 19 were a brass insert, Strobl either alone or in combination with other references would still fail to teach or suggest the feature of claim 5 that the brass insert is soldered to the printed circuit card. For these reasons, in addition to the reasons set forth with respect to claim 1 from which claim 5 depends, claim 5 is allowable over the prior art of record.

It is respectfully submitted that claims 7 and 8 need not be discussed in the summary to be in issue. It is respectfully submitted that Siebold et al. is not a reference to which one of skill in the art would look to address any issue with respect to motor units. Siebold et al. relates to the electrical connection of acoustic wave devices such as transducers to other circuit members. (Siebold et al., col. 1, ll. 12-15). In contrast, the present invention presents the problem of mechanically connecting an over-molding to a housing of a motor unit. In addition, there is no indication in Siebold et al. that the snap protrusions 34 are elastic attachment flaps as described in claim 7. It is further submitted that Blumenberg's teaching of detent hooks 57 are not elastic attachment flaps as described by the Applicant, and there is no teaching or suggestion

for the need to easily attach 10 to 14 in Strobl. Easy attachment is not the goal of the flaps as taught by the Applicant. In addition, the Examiner fails to point out where in the prior art the feature of claim 8 is taught. It is respectfully submitted that claims 7 and 8 are also allowable over the prior art of record.

The Examiner rejects claims 9 and 10 under 35 U.S.C. § 103(a) as being unpatentable over Stobl in view of Sano et al, Blumenberg, Archer et al, Knappe and Schneider et al. It is respectfully submitted that the addition of either Knappe or Schneider et al. to the combination of Stobl, Blumenberg and Sano et al. or the combination of Stobl, Blumenberg and Archer et al. that the Examiner used to reject claim 1 fails to teach or suggest all of the features of claims 9 and 10. Specifically, no combination of the references teaches or suggests all the features of claim 1, particularly the feature of claim 1 of an over-molding molded to portions of a brass insert. In addition, none of the cited references teaches or suggests the feature of claim 10 of a connector mounted in an over-molding.

Finally, the Examiner rejects claims 1, 2 and 6 under 35 U.S.C. § 103(a) as being unpatentable over Adam et al. in view of Blumenberg and Sano et al. It is respectfully submitted that the Examiner's position that plastic parts 1 and 3 together form a molding is not dispositive of the issue here. The plastic parts 1 and 3 are not an over-molding molded to portions of a brass insert. Also, the guide sleeve 4.7 is not a brass insert, and there is no motivation in the art to include a brass insert in Adam et al. Similarly, there is no motivation to include a heat sink in Adam et al. It is respectfully submitted that claim 1 and its dependent claims are allowable over the prior art of record.

With this Amendment, new claims 12-18 have been added to describe features of the present invention disclosed but not previously claimed. It is respectfully submitted that these claims are also allowable over the prior record, both by dependency from allowable claims and because of the unique features cited therein.

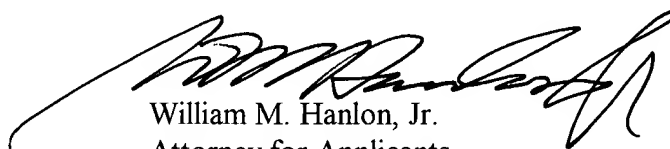
It is respectfully submitted that this Amendment overcomes all of the Examiner's objections and rejections to the application as originally filed. It is further submitted that this Amendment has antecedent basis in the application as originally filed, including the specification, claims and drawings, and that this Amendment does not add any new subject matter to the

application. Reconsideration of the application as amended is requested. It is respectfully submitted that this Amendment places the application in suitable condition for allowance; notice of which is requested.

If the Examiner feels that prosecution of the present application can be expedited by way further communication, the Examiner is invited to contact the Applicant's attorney at the telephone number listed below.

Respectfully submitted,

YOUNG, BASILE, HANLON, MacFARLANE, WOOD &  
HELMHOLDT, P.C.

A handwritten signature in black ink, appearing to read 'W. M. Hanlon, Jr.', is written over the typed name.

William M. Hanlon, Jr.  
Attorney for Applicants  
Registration No. 28422  
(248) 649-3333

3001 West Big Beaver Rd., Suite 624  
Troy, Michigan 48084-3107  
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WMH/MLK